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APPLICATION NO.	F	ILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/766,106		01/27/2004	Danny Lewis	PRJ-006CN	2190	
959	7590	03/09/2005		EXA	EXAMINER	
LAHIVE of 28 STATE		FIELD, LLP.	. AZPURU	AZPURU, CARLOS A		
BOSTON, MA 02109				ART UNIT	PAPER NUMBER	
ŕ				1615	1615	
				DATE MAILED, 02/00/20	DATE MAIL ED. 02/00/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

	I A II	1			
	Application No.	Applicant(s)			
Office Action Summary	10/766,106	LEWIS ET AL.			
omce Action Summary	Examiner	Art Unit			
The MAILING DATE of this communication app	Carlos A. Azpuru	1615			
Period for Reply	ours on the cover sheet with the c	orrespondence dudress			
A SHORTENED STATUTORY PERIOD FOR REPL' THE MAILING DATE OF THIS COMMUNICATION.  - Extensions of time may be available under the provisions of 37 CFR 1.13 after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a reply - If NO period for reply is specified above, the maximum statutory period who is the period for reply within the set or extended period for reply will, by statute, Any reply received by the Office later than three months after the mailing earned patent term adjustment. See 37 CFR 1.704(b).	36(a). In no event, however, may a reply be tin y within the statutory minimum of thirty (30) day vill apply and will expire SIX (6) MONTHS from , cause the application to become ABANDONE	nely filed s will be considered timely. the mailing date of this communication. D (35 U.S.C. § 133).			
Status		, .			
1) Responsive to communication(s) filed on					
	 action is non-final.				
3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is					
closed in accordance with the practice under E	•				
Disposition of Claims					
4)⊠ Claim(s) <u>1-22</u> is/are pending in the application.					
4a) Of the above claim(s) is/are withdraw					
5) Claim(s) is/are allowed.					
6)⊠ Claim(s) <u>1-22</u> is/are rejected.					
7) Claim(s) is/are objected to.	•				
8) Claim(s) are subject to restriction and/or	r election requirement.				
Application Papers					
9)☐ The specification is objected to by the Examine	г.				
	epted or b) objected to by the I	Examiner.			
Applicant may not request that any objection to the					
Replacement drawing sheet(s) including the correct	ion is required if the drawing(s) is obj	jected to. See 37 CFR 1.121(d).			
11)☐ The oath or declaration is objected to by the Ex	aminer. Note the attached Office	Action or form PTO-152.			
riority under 35 U.S.C. § 119	F 1.				
12) Acknowledgment is made of a claim for foreign	priority under 35 U.S.C. § 119(a)	e-(d) or (f).			
a) ☐ All b) ☐ Some * c) ☐ None of:  1. ☐ Certified copies of the priority documents	have been accessed	•			
		an Na			
<ul><li>2. Certified copies of the priority documents</li><li>3. Copies of the certified copies of the prior</li></ul>					
application from the International Bureau		ed in this National Stage			
* See the attached detailed Office action for a list		ed.			
ttachment(s)					
Notice of References Cited (PTO-892)	4) Interview Summary				
) Notice of Draftsperson's Patent Drawing Review (PTO-948) ) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date	Paper No(s)/Mail Da 5) Notice of Informal P 6) Other:	ate atent Application (PTO-152)			
. Patent and Trademark Office OL-326 (Rev. 1-04) Office Ac	tion Summary Pa	rt of Paper No./Mail Date 03042005			

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## **DETAILED ACTION**

Receipt is acknowledged of the information disclosure statement filed 07/19/2004.

## Claim Rejections - 35 USC § 112

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

Claim 1 is rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 is indefinite in the use of the phrase "predominantly a single species". Clarification is requested as it the terms seem to indicate that multiple forms of this pharmaceutical may be formed. As understood by this examiner, the claimed pharmaceutical is the combination of a pegylated interferon (or any conjugate of a hydrophilic polymer and interferon) and a biodegradable polymer. The formation of 'species' of this product is not something applicant has particularly pointed out. Applicant is therefore requested to clarify this terminology.

## Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA

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1982); In re Vogel, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, In re Thorington, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims 1-22 are rejected under the judicially created doctrine of obviousnesstype double patenting as being unpatentable over claims 1-39 of U.S. Patent No. 6,706,289 (US'289). Although the conflicting claims are not identical, they are not patentably distinct from each other because US'289 discloses the combination of various bioactives conjugated with a hydrophilic polymer and a biodegradable polymer. (see claim 1). Claim 4 sets out the use of the same biodegradable polymers. Bioactives such as interferon, biphalin, somatostatin and enkephalin are found in claim 6. Pegylated conjugates are specifically disclosed claims 5 and 14. Microcapsules of this combination of conjugated bioactive and biodegrabale polymer are claimed in claim 7-15. Sizing of those nanoparticles or microcapsules would depend upon the type of delivery desired, so that sizing the particles between 20 and 100 um is a skill within that of the ordinary practitioner of microencapsulation. This ordinary practitioner would know how to vary such particles according to wther they were being delivered orally, mucosally, by inhalation of by injection. Therefore those of ordinary skill in the art would have found it well within their skill to select bioactives such as interferon, biphalin, somatostatin and enkephalin for conjugation with a hydrophilic polymer such as PEG, and further to combine this conjugate with a biodegradable polymer as set out in the

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claims of US'289. Further, the ordinary practitioner would expect similar therapeutic results from the claimed combination given the claims of '289. As such, the instant claims would have been obvious given the claims set out in US'289.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Carlos A. Azpuru whose telephone number is (571) 272-0588. The examiner can normally be reached on Tu-Fri, 6:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Thurman K. Page can be reached on (571) 272-0602. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ca

Carlos A. Azpúr PRIMARY EXAMINER **GROUP 1500** 

CARLOS A. AZPURU